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BER performance of OFDM system with the effect of error control code

(Conference Paper)

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Abstract

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Orthogonal Frequency Division Multiplexing (OFDM) is one of the promising modulation techniques suitable for high data rates in a wireless communication system. OFDM is the most effective modulation technique suitable for multipath communication channel and fading environment at reasonable complexity. However, the existence of Error Control Coding (ECC) in OFDM system is necessary for the reliable data transmission. This is due to the capability of ECC which can detect and correct the data received. Two types of ECC performance which are Hamming code and convolutional code are investigated in this paper. The simulation system and parameter are described and the results are discussed. © 2014 IEEE.

Author keywords

ECC OFDM Rayleigh Channel Wireless Communication System

Indexed keywords

Engineering controlled terms: Codes (symbols) Complex networks Convolutional codes Frequency division multiplexing
Frequency modulation Modulation Telecommunication networks
Wireless telecommunication systems

ECC

Error control code

Error control coding

Modulation techniques

Multipath communications

Rayleigh channel

Reliable data transmission

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Engineering main heading: Orthogonal frequency division multiplexing

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